

What is claimed is:

1. A dishwasher comprising:

a housing;

a tub in the housing to hold tableware;

an injector assembly for injecting water on the tableware in the tub; and

an inlet valve assembly comprising:

a case installed at an inlet passage for supplying the water to the tub,  
the case having an inlet opening via which the water flows in and an outlet  
opening via which the water is discharged;

a first valve provided to the case to selectively open/close a passage  
in the case; and

a second valve closing the passage in the case in case that the water  
leaks.

2. The dishwasher as claimed in claim 1, wherein the case is installed at a lower  
part of a rear panel of the housing.

3. The dishwasher as claimed in claim 1, wherein the first valve selectively  
opens/closes the inlet opening.

4. The dishwasher as claimed in claim 1, wherein the second valve closes the  
outlet opening.

25           5.       The dishwasher as claimed in claim 1, wherein the second valve closes the  
26 passage by the water leaking on a base panel of the housing.

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28           6.       The dishwasher as claimed in claim 1, the second valve comprising:  
29 a diaphragm installed at the passage; and  
30 a pressing mechanism floated by the leaking water to press the diaphragm to close the  
31 passage.

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33           7.       The dishwasher as claimed in claim 6, the pressing mechanism comprising:  
34 a float configured to floated by the leaking water; and  
35 a plunger separated from the float to press the diaphragm if the float is floated.

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37           8.       The dishwasher as claimed in claim 7, wherein the plunger is attached to or  
38 detached from the float according to a distance from the float.

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40           9.       The dishwasher as claimed in claim 7, the pressing mechanism further  
41 comprising a magnet detaching the plunger from the magnet according to a distance from the  
42 plunger in the case.

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44           10.      The dishwasher as claimed in claim 7, wherein the float is guided by a guide  
45 provided on a base panel of the housing.

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47           11.      The dishwasher as claimed in claim 7, wherein the case comprises a holder  
48 guiding a movement of the float.

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50           12.     The dishwasher as claimed in claim 7 or claim 9, the float comprising:  
51           a body floated by the leaking water; and  
52           an extension member extending from the body to be adjacent to the plunger in the  
53 case.

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55           13.     The dishwasher as claimed in claim 12, wherein the body is formed of  
56 Styrofoam.

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58           14.     The dishwasher as claimed in claim 12, wherein the extension member  
59 comprises a rod installed at the body and an arm extending from the rod to be adjacent to the  
60 plunger.

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62           15.     The dishwasher as claimed in claim 14, wherein the arm is movably installed  
63 at the rod.

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65           16.     The dishwasher as claimed in claim 12, wherein the magnet is installed at the  
66 extension member in the vicinity of the plunger.

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68           17.     The dishwasher as claimed in claim 14, wherein the magnet is installed at the  
69 arm.

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71           18.     The dishwasher as claimed in claim 14, wherein the rod comprises a step  
72 supporting the arm.

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74           19.     The dishwasher as claimed in claim 14, wherein the rod comprises a plurality  
75 of steps to install the arm at a predetermined portion of the rod selectively.  
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77           20.     An inlet valve assembly comprising:  
78           a case installed at an inlet passage for supplying water, the case having an inlet  
79 opening via which the water flows in and an outlet opening via which the water is discharged;  
80           a first valve provided to the case to selectively open/close a passage in the case; and  
81           a second valve closing the passage in the case in case that the water leaks.  
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83           21.     The inlet valve assembly as claimed in claim 20, wherein the case is installed  
84 at a lower part of a rear panel of a housing of a home appliance.  
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86           22.     The inlet valve assembly as claimed in claim 20, wherein the first valve  
87 selectively opens/closes the inlet opening.  
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89           23.     The inlet valve assembly as claimed in claim 20, wherein the second valve  
90 closes the outlet opening.  
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92           24.     The inlet valve assembly as claimed in claim 20, wherein the second valve  
93 closes the passage by the water leaking on a base panel of a housing of a home appliance.  
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95           25.     The inlet valve assembly as claimed in claim 20, the second valve  
96 comprising:

97 a diaphragm installed at the passage; and  
98 a pressing mechanism floated by the leaking water to press the diaphragm to close the  
99 passage.

100  
101 26. The inlet valve assembly as claimed in claim 25, the pressing mechanism  
102 comprising:

103 a float configured to floated by the leaking water; and  
104 a plunger separated from the float to press the diaphragm if the float is floated.

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106 27. The inlet valve assembly as claimed in claim 26, wherein the plunger is  
107 attached to or detached from the float according to a distance from the float.

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109 28. The inlet valve assembly as claimed in claim 26, the pressing mechanism  
110 further comprising a magnet detaching the plunger from the magnet according to a distance  
111 from the plunger in the case.

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113 29. The inlet valve assembly as claimed in claim 26, wherein the float is guided  
114 by a guide provided on a base panel of a housing of a home appliance.

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116 30. The inlet valve assembly as claimed in claim 26, wherein the case comprises  
117 a holder guiding a movement of the float.

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119 31. The inlet valve assembly as claimed in claim 26 or claim 28, the float  
120 comprising:

121 a body floated by the leaking water; and  
122 an extension member extending from the body to be adjacent to the plunger in the  
123 case.

124  
125 32. The inlet valve assembly as claimed in claim 31, wherein the body is formed  
126 of Styrofoam.

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128 33. The inlet valve assembly as claimed in claim 31, wherein the extension  
129 member comprises a rod installed at the body and an arm extending from the rod to be  
130 adjacent to the plunger.

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132 34. The inlet valve assembly as claimed in claim 33, wherein the arm is movably  
133 installed at the rod.

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135 35. The inlet valve assembly as claimed in claim 31, wherein the magnet is  
136 installed at the extension member in the vicinity of the plunger.

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138 36. The inlet valve assembly as claimed in claim 33, wherein the magnet is  
139 installed at the arm.

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141 37. The inlet valve assembly as claimed in claim 33, wherein the rod comprises a  
142 step supporting the arm.

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144 38. The inlet valve assembly as claimed in claim 33, wherein the rod comprises a

145 plurality of steps to install the arm at a predetermined portion of the rod selectively.